

Appln. No. 10/693,849
Amendment

AMENDMENTS TO THE CLAIMS

Listing of claims:

This listing of claims will replace all prior versions and listings of claims in the application.

1. (Currently Amended) A filter for reactive reflection of acoustical energy within a fluid conducted through a piping system, comprising:

an outer casing enclosing a flow chamber between opposite axial ends thereof through which the fluid is conducted;

an inner cylindrical support drum positioned within the outer casing and surrounding the flow chamber;

a plurality of axial sections positioned within the outer casing and surrounding the inner cylindrical support drum, wherein:

at least a portion of each axial section is exposed to fluid within the flow chamber through an associated hole in the inner cylindrical support drum,

each axial section is separated from an adjacent axial section by a connector plate,

each axial section has a length that differs from a length of each of the other axial sections, and

wherein each axial section further comprises:

flexible means positioned within the outer casing and surrounding the inner cylindrical support drum for exposure to the fluid within the flow chamber through

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the hole in the inner cylindrical support drum associated with the axial section

~~throughout between said opposite axial ends of the casing; and~~

gas cavity means enclosed within the outer casing through which the

flexible means is exposed to pressurized gas in opposition to said exposure to the

fluid in the flow chamber

~~and acoustic responsive deformation means mounted radially between the~~

~~flexible means and the flow chamber through which the flexible means is~~

~~deformed in response to said exposure to the fluid in the flow chamber in~~

~~accordance with the acoustical energy in the fluid.~~

2-4. (Cancelled)

5. (Currently Amended) The filter as defined in claim 1, wherein said flexible means further comprises~~[[:]]~~ a cylindrical rubber layer; and wherein said hole in the inner cylindrical support drum associated with the axial section comprises a ~~cylindrical support having~~ slanted hole~~[[s]]~~ ~~therein~~ on which the rubber layer is positioned under said exposure to the fluid within the flow chamber through the slanted hole~~[[s]]~~.

6. (New) The filter as defined in claim 5, wherein each rubber layer has a thickness that differs from a thickness of each of the other rubber layers.

7. (New) The filter as defined in claim 1, wherein each axial section has a radial dimension that differs from a radial dimension of each of the other axial sections.

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8. (New) The filter as defined in claim 7, wherein each gas cavity means has a volume that differs from a volume of each of the other gas cavity means.

9. (New) The filter as defined in claim 1, wherein each gas cavity means includes a selectively controlled valve means for equalizing a pressure in the gas cavity means with a pressure of the fluid in the flow chamber.

10. (New) The filter as defined in claim 1, wherein each axial section further comprises an outer cylindrical support drum positioned within the outer casing and surrounding the flexible means at a location opposite the inner cylindrical support drum.

11. (New) The filter as defined in claim 10 wherein at least a portion of the flexible means is exposed to pressurized gas through a hole in the outer cylindrical drum associated with the axial section.